

DEVIATIONS FROM AVERAGE PRECIPITATION.

The following table shows, for certain stations, as reported by voluntary observers, the average precipitation for the month of February for a series of years; the precipitation for February, 1886; and the departures from the average:

Station.	County.	Average pre- cipitation for Feb.	Number of years.	Precipitation for Febru- ary, 1886.	Departure.
		Inches.		Inches.	Inches.
Arkansas.					
Lead Hill.....	Boone.....	7.39	4	2.61	- 4.78
California.					
Sacramento.....	Sacramento.....	2.70	12	0.35	- 2.35
Connecticut.					
Hartford.....	Hartford.....	3.58	14	6.16	+ 2.58
Middletown *.....	Middlesex.....	4.03	28	7.43	+ 3.40
Wallingford *.....	New Haven.....	4.25	26	8.77	+ 4.52
Dakota.					
Webster.....	Day.....	3.21	3	1.93	- 1.28
Illinois.					
Anna.....	Union.....	3.92	11	2.38	- 1.54
Mattoon.....	Coles.....	3.94	6	0.25	- 2.69
Peoria.....	Peoria.....	2.04	30	1.86	- 0.18
Riley.....	McHenry.....	1.66	23	1.61	- 0.05
Swanwick.....	Perry.....	5.16	4	1.31	- 3.85
Sycamore.....	De Kalb.....	2.64	4	1.85	- 0.79
Indiana.					
Lafayette.....	Tippecanoe.....	4.12	7	1.32	- 2.80
Mauzy.....	Rush.....	4.46	6	1.14	- 3.32
Spiceland.....	Henry.....	2.91	26	1.01	- 1.90
Vevay.....	Switzerland.....	2.93	21	1.51	- 0.42
Iowa.					
Cresco.....	Howard.....	0.95	10	0.95	0.00
Monticello.....	Jones.....	1.89	32	1.31	- 0.58
Kansas.					
Independence.....	Montgomery.....	2.22	14	1.48	- 0.74
Wellington.....	Sumner.....	1.71	8	1.03	- 0.68
Yates Centre.....	Woodson.....	2.09	6	1.62	- 0.47
Maine.					
Gardiner.....	Kennebec.....	3.55	48	7.25	+ 3.70
Orono *.....	Penobscot.....	3.88	18	5.42	+ 1.54
Maryland.					
Fallston.....	Harford.....	3.87	15	5.96	+ 2.09
Massachusetts.					
Amherst *.....	Hampshire.....	3.12	51	4.36	+ 1.24
Cambridge *.....	Middlesex.....	3.57	45	7.82	+ 4.25
Chestnut Hill *.....	Middlesex.....	4.43	11	7.89	+ 3.46
Framingham *.....	Middlesex.....	4.06	12	6.28	+ 2.22
Lake Cochituate *.....	Middlesex.....	3.60	35	6.86	+ 3.26
Lowell *.....	Middlesex.....	2.88	60	6.26	+ 3.38
Lynn *.....	Essex.....	3.65	12	7.47	+ 3.82
Mystic Lake *.....	Middlesex.....	4.12	11	7.20	+ 3.08
New Bedford *.....	Bristol.....	3.80	73	7.05	+ 3.25
Somerset.....	Bristol.....	3.63	16	8.70	+ 5.07
Springfield *.....	Hampden.....	3.49	39	4.80	+ 1.31
Waltham *.....	Middlesex.....	2.67	57	7.84	+ 5.17
Williamstown *.....	Berkshire.....	2.50	21	2.61	+ 0.11
Worcester.....	Worcester.....	3.21	45	6.32	+ 3.11
New Brunswick.					
Saint John *.....	Saint John.....	4.70	26	6.08	+ 1.38
New Hampshire.					
Concord *.....	Merrimac.....	2.55	31	4.27	+ 1.72
Hanover *.....	Grafton.....	1.87	20	1.24	- 0.63
Nevada.					
Carson City.....	Ormsby.....	1.17	7	0.28	- 0.89
New York.					
Factoryville.....	Tioga.....	1.90	4	0.94	- 0.96
Palermo.....	Oswego.....	2.25	33	2.36	+ 0.11
Plattsburg Barracks.....	Clinton.....	1.52	17	1.22	- 0.30
North Volney.....	Oswego.....	2.69	14	2.25	- 0.44
Ohio.					
Wauseon.....	Fulton.....	2.93	12	0.84	- 2.09
Pennsylvania.					
Dyberry.....	Wayne.....	2.74	17	2.43	- 0.31
Rhode Island.					
Providence.....	Providence.....	3.67	55	11.31	+ 7.64
South Carolina.					
Kirkwood.....	Kershaw.....	3.56	20	1.59	- 1.97
Stateburg.....	Sumpter.....	2.27	5	1.46	- 0.81
Texas.					
New Ulm.....	Austin.....	4.71	14	1.65	- 3.06
Vermont.					
Lunenburg *.....	Essex.....	2.89	38	1.67	- 1.22
Newport *.....	Orleans.....	2.73	11	3.23	+ 0.50
Strafford *.....	Orange.....	2.70	11	2.70	0.00
Virginia.					
Bird's Nest.....	Northampton.....	3.61	18	5.00	+ 1.39
Dale Enterprise.....	Rockingham.....	3.45	6	3.59	+ 0.14
Variety Mills.....	Nelson.....	3.54	7	4.02	+ 0.48
Wytheville.....	Wythe.....	3.33	21	1.53	- 1.80
West Virginia.					
Helvetia.....	Randolph.....	4.36	10	2.71	- 1.65

* From the "Bulletin of the New England Meteorological Society."

The following notes in connection with this subject are reported by voluntary observers:

Arkansas.—Lead Hill, Boone county: the total precipitation for the winter of 1885-'86, 7.36, is 8.09 below the average for the past four years.

Connecticut.—Hartford, Hartford county: the rainfall of the 11-13th amounted to 4.32, and was the heaviest precipitation in the past fourteen years.

Illinois.—Riley, McHenry county: the total precipitation for the winter

months of 1885-'86, 7.58, is 2.08 above the average for the past twenty-two winters.

Indiana.—Vevay, Switzerland county: the greatest precipitation that has occurred in any February for a period of twenty-one years was 10.23, in 1884, and the least, 0.40, in 1877. The total snowfall for February, 1886, 6.06, is 2.23 above the average; the greatest monthly snowfall in any one February that has occurred during the above period was 11.75, in 1867; no snow fell during February in 1877 and 1878.

Iowa.—Monticello, Jones county: the greatest monthly precipitation that has occurred in any February during a period of thirty-two years was 4.22, in 1857, and the least, 0.32, in 1877. The greatest February snowfall that occurred during this time was 15.80, in 1874, and the least, 0.25, in 1869, the normal being 7.84.

Kansas.—Yates Centre, Woodson county: the total precipitation for the winter months of 1885-'86, 4.34, is 0.26 below the average for the past six years.

Maine.—Cornish, York county: the total snowfall for February was 22.0; the largest February snowfall for a period of twenty-nine years, 42.0, occurred in 1882, and the least, 5.0, in 1875.

Maryland.—Fallston, Harford county: the greatest monthly precipitation for February for a period of fifteen years was 7.01, in 1884, and the least, 1.60, in 1872.

Massachusetts.—Worcester, Worcester county: the precipitation for February, 1886, was far above the mean; the total rainfall, including melted snow, was 6.32 against 3.49 during the same period last year, while the average for the forty-five preceding years is but 3.21. The snowfall during the month was 5.50 against 11.12 during the same period in 1884, while the mean for the forty-five preceding years is 11.91. The aggregate snowfall this winter was 36.83.

New York.—Palermo, Oswego county: the total snowfall for February, 1886, was 4.75, or 17.75 below the average for the thirty-three years; the greatest February snowfall that has occurred in this period was 61.0, in 1856, and the least, 1.0, in 1877; the snowfall for the winter months of 1885-'86, 43.0, is 18.0 below the average for the same number of years.

North Volney, Oswego county: the greatest monthly precipitation in any February for a period of fourteen years was 4.70, in 1876, and the least, 0.80, in 1877. The precipitation for the winter months of 1885-'86, 10.35, is 1.00 above the average; the greatest winter precipitation for this period was 18.95, in 1878-'79, and the least, 5.95, in 1876-'77.

Ohio.—Wauseon, Fulton county: the greatest monthly precipitation for February that has occurred in a period of twelve years was 6.81, in 1876, and the least, 0.12, in 1877. The snowfall for February, 1886, is just one-half the average.

Texas.—New Ulm, Austin county: the greatest precipitation that has occurred in any February during the past fourteen years was 10.94, in 1882, and the least, 1.06, in 1885.

Virginia.—Variety Mills, Nelson county: the greatest monthly precipitation that has occurred in February during the past seven years was 7.12, in 1884, and the least, 1.75, in 1879.

LARGEST MONTHLY SNOWFALLS.

[Expressed in inches and tenths.]

Monthly snowfalls of five inches or more were reported from the various states and territories during the month, as follows:

Arkansas.—Lead Hill, 17; Fort Smith, 8.

California.—Cisco, 23; Blue Lake, 19; Emigrant Gap, 16; Summit, 14; Boca, 7; Tacoma, 6; Towels and Truckee, 5.

Connecticut.—New London, 12.4; North Colebrook, 8.3; Bethel and Wallingford, 6.

Colorado.—Pike's Peak, 7.6; Denver, 7.4.

Dakota.—Richardton, 22; Deadwood, 18.8; Fort Buford, 11.9; Fort Totten, 8.8; Webster, 7.9; Vermillion and Bismarck, 5.5; Yankton, 5.3.

District of Columbia.—Kendall Green, 14; Washington City, 12.5.

Illinois.—Waukegan, 12; Chicago, 7.5; Anna, 7.1; Makanda and Cedarville, 7; Rockford, 6.6; Riley, Geneseo, and Marengo, 6.5; Prairieville, Payson, and Elizabethtown, 6; Sycamore, 5.5.

Indiana.—Laconia, 13; Jeffersonville, 9.5; Princeton, 9; Marengo, 8.6; Connersville, 8.5; Sunman, Columbus, and Butlerville, 8; Blue Lick, 7.8; Guilford, 7.7; Mauzy, 7.1; Degonia, 7; Richmond and Knightstown, 6.5; Vevay, 6.1; Brookville, 6; Spiceland, 5.6; Greencastle, 5.1.

Iowa.—Mauchester, 10; Cresco and Dubuque, 9; Independence, 8; West Union, 7.6; Monticello, 6.3; Cedar Rapids, Muscatine, and Clinton, 6; Oskaloosa, 5.2.

Kansas.—Ninnescah, 14.5; Wellington and Elk Falls, 10; Independence, 9; Concordia, 7.5; Yates Centre and El Dorado, 5.

Kentucky.—Richmond, 14.1; Frankfort, 10.3; Louisville, 7.3.

Maine.—Kent's Hill, 36; Cornish, 35; Orono, 32; Buckfield and Bridgeton, 28; Solon, 27.1; Belfast and Gardiner, 19; Mayfield, 16; Portland, 11.2; Eastport, 5.9.

Maryland.—Baltimore, 15.3; Woodstock, 15; Fallston, 14.8; Cumberland, 5.

Massachusetts.—New Bedford, 14; Fall River, 12; Somerset, 11.2; Provincetown, 11.1; Nantucket, Beverly Farms, and Cotuit, 10; Williamstown *a*, 9; Taunton *b*, 8.9; Rowe, South Hingham, and Williamstown *b*, 8; Fitchburg, 7.8; Taunton *a*, 7.5; Springfield, 6.2; Blue Hill Observatory, 6; Gilbertville, 5.8; Worcester, 5.6; Newburyport and Northfield, 5.5; Princeton and Chicopee, 5.

Michigan.—Pentwater, 19; Mackinaw City, 18.7; Traverse City, 16.5; Grand Haven, 14.3; Thornville, 14; Escanaba, 11.3; Kalamazoo, 11.2; Northport, 10; Alpena, 9.6; Marquette, 7.8; Hudson, 6.3; Lansing and Mottville, 5.

Minnesota.—Duluth, 20.2; Northfield, 9.8; Mankato, 8.8; Saint Vincent, 7.1; Bird Island, 6.8; Moorhead, 6.6; Red Wing, 6.5; Grand Forks, 6.2; Minneapolis, 5.5.

Missouri.—Pierce City, 15; Springfield, 14; Lamar, 11.6; Centerville, 6.6.

Montana.—Fort Custer, 21; Fort Maginnis, 14.6; Fort Shaw, 11.5; Fort Assinaboine, 6.4.

Nebraska.—Hay Springs, 10.8; Genoa, 7.5; Yutan, 6.5; Valentine, 6.3; Fairbury and North Platte, 6; Brownville, 5.5.

New Brunswick.—Parker's Ridge, 33; Saint John, 22.8.

New Hampshire.—Berlin Mills, 26; Grafton, 22; Littleton, 15.5; Mount Washington, 11.2; Walpole, 9.5; Hanover, 7.8; Warner, 7.

New Jersey.—Clayton and Sandy Hook, 18; Vineland, 16.5; Moorestown, 14.2; Beverly, 12.7; Princeton, 6.5; Atlantic City, 6.1; Dover, 5.5; Paterson, 5.2; South Orange, 5.

New Mexico.—Santa Fé, 6.

New York.—Buffalo, 34.3; Rochester, 16; Le Roy, 12.1; Humphrey, 11.5; Auburn, 10; White Plains and Brooklyn, 5.5.

Ohio.—Garrettsville, 13.5; Yellow Springs, 13.3; Cleveland *a*, 10.7; Jacksonborough, 10.5; Westerville, 10.2; College Hill, 8.5; Postoria, 8.2; Toledo, 7.9; North Lewisburg, 7; Tiffin, 6.5; Cincinnati *a*, 6.4; Ruggles and West Milton, 6; Cincinnati *b*, 5.8; Cleveland *b*, 5.1.

Pennsylvania.—Zionsville, 15; Erie, 12.6; West Chester, 12.5; Germantown, 12; Philadelphia, 9.8; Fallsington, 9.1; Dyberry, 9; Easton, 6.2; Troy and Quakertown, 6; Grampian Hills and Blooming Grove, 5.

Rhode Island.—Block Island, 14; Narragansett Pier, 10; Providence *a*, 8; Pawtucket, 6.9; Olneyville, 6.8; Lonsdale, 6; Providence *b*, 5.

Tennessee.—Austin, 21; Paris, 20.8; Milan, 20; Nashville, 17.9; Memphis, 9.6; Knoxville, 6.4.

Vermont.—Newport, 22; Marlborough, 16.8; Strafford, 15; Chelsea, 13.5; Lunenburg, 13.2; Jacksonville, 12.5; Dorset, 12.2; Burlington and Post Mills, 11; Townshend, 10.7; Charlotte, 10.5; Windsor, 9.9; Brattleborough, 9.5; Vernon, 8.8; Poultney, 6.

Virginia.—Dale Enterprise, 18; Chincoteague, 17.3; Accotink and University of Virginia, 15; Bruington, 14; Variety Mills, 13.5; Lynchburg, 12; Marion, 10; Wytheville, 7 to 8; Bird's Nest, 6.9.

West Virginia.—Helvetia, 19.8.

Wisconsin.—Milwaukee, 15.3; Madison, 9; Prairie du Chien, 8.2; La Crosse, 7.5; Embarras, 7.2.

Wyoming.—Fort Bridger, 5.6.

DEPTH OF UNMELTED SNOW ON GROUND AT END OF MONTH.

[Expressed in inches and tenths.]

California.—Blue Lick, 8.

Connecticut.—North Colebrook, 4; Bethel, trace.

Colorado.—Pike's Peak, 10; Denver, 3.

Dakota.—Richardton, 12; Fort Buford, 4.9; Fort Totten, 4.2; Webster, 3.2; Bismarck, 2.2; Deadwood, 2.0; Vermillion, 1.2; Huron, 1; Yankton, 0.6.

Illinois.—Cairo, 11.7; Riley, 4.8; Sycamore, 4; Chicago, 3; Springfield, 2; Bloomington, 1.2; Windsor, trace.

Indiana.—Spiceland and Greencastle, 0.2; Jeffersonville and Sunman, trace.

Iowa.—Cresco, 8 to 48; West Union, 8 to 10; Monticello and Manchester, 8; Independence, 7.5; Dubuque, 6.3; Clinton and Muscatine, 6; Bancroft, 5; Cedar Rapids and Fort Madison, 4.5; Des Moines *a*, 4.1; Davenport, Des Moines *b*, and Oskaloosa *b*, 3; Oskaloosa *a*, 2.5.

Kansas.—Wyandotte and Concordia, 0.5; Leavenworth, 0.3; Allison, trace.

Maine.—Orono, 36; Buckfield, 30; Gardiner, 24; Portland, 5; Eastport, 4; Bar Harbor, 2.

Massachusetts.—Williamstown and Princeton, 5; Milton, New Bedford, Somerset, and Westborough, 3; Fall River and Blue Hill Observatory, 2; Amherst and Boston, 1; Mendon and Taunton, 0.5.

Michigan.—Traverse City, 24; Marquette, 14; Mackinaw City and Grand Haven, 9; Pentwater, 5; Alpena, 4; Escanaba, 1.6; Thornville, drifts.

Minnesota.—Duluth, 14; Saint Vincent, 8.5; Minneapolis, 6; Moorhead, 5; Saint Paul, 3.

Missouri.—Conception, 1.

Montana.—Fort Shaw, 8; Fort Assinaboine, 5.3; Fort Custer, 4; Fort Benton, 3.7; Helena, 3; Fort Maginnis, 2.

Nebraska.—Yutan, 5.5; Crete, Genoa, and Brownville, 4; De Soto, 3; Omaha and Fairbury, 2; Fremont, 1.8; Valentine, 1.6; Hay Springs and Stockham, 1.5; Marquette, 0.5.

New Hampshire.—Nashua and Mount Washington, 2.

New York.—North Volney and Buffalo, 6; Cooperstown and Humphrey, 3; Palermo and Auburn, 2; Rochester, 1; Albany, 0.5; Factoryville, trace.

Ohio.—Cleveland, 5.1; Napoleon, 0.5; Toledo, 0.2; Cincinnati, 0.1; Westerville, Wauseon, Garrettsville, Hiram, Tiffin, and Fostoria, trace.

Pennsylvania.—Dyberry, 3; Erie, 0.5; Blooming Grove, trace.

Texas.—Fort Elliott, 0.9.

Vermont.—Strafford, 16; Newport, 15; Brattleborough, 12; Dorset, 8.2; Lunenburg, 8; Poultney, 6; Charlotte, 5 to 6; Post Mills and Burlington, 5.

Virginia.—Wytheville, drifts; Dale Enterprise, trace.

Wisconsin.—Neillsville, 20; Embarras, 14; La Crosse, 10; Prairie du Chien, 8; Madison, 6.5; Milwaukee, 4; Evansville, 2.

SNOW FROM A CLOUDLESS SKY.

Philadelphia, Pennsylvania: snow fell on the 6th while the sky was clear of clouds for a distance of 35° from the zenith, and stars shining brightly.

Nashville, Tennessee: light rain and snow occurred from 9.56 to 10.15 p. m. of the 6th, from an almost cloudless sky; but .4 nimbus clouds were observed, which were fully 14° east of the zenith.

Yates Centre, Woodson county, Kansas: between 6.30 and 9.30 p. m. of the 3d a light fall of snow occurred, amounting to one-tenth of an inch in depth, the sky being free from clouds.

The observer at Yellow Springs, Greene county, Ohio, reports that snow fell from a cloudless sky on the 3d and 4th.

HAIL.

Los Angeles, California: a severe hail storm occurred from 3.13 to 3.17 p. m. and also for a few moments at 4 p. m. of the 28th; the hail-stones were about the size of peas and fell with considerable force, covering exposed places to the depth of half an inch or more, and which in some places remained unmelted until late in the afternoon; the storm was not accompanied by lightning or thunder.

Hail storms were also reported from the following states and territories:

Arizona.—Prescott, 22d, 23d.

Arkansas.—Mount Ida, 2d, 3d.

California.—Sacramento, Blue Lake, Los Angeles, and San Diego, 28th; San Francisco, 27th, 28th.

Connecticut.—North Colebrook, 19th.
Illinois.—Philo, 6th.
Kansas.—Leavenworth, 24th.
Louisiana.—Grand Coteau, 9th.
Maine.—Cornish, 11th, 12th.
Michigan.—Escanaba and Marquette, 24th.
Nebraska.—North Platte, 13th.
New Jersey.—Dover, 25th.
New Mexico.—Fort Wingate, 1st, 16th; Lava, 23d, 26th.
New York.—Factoryville, 25th.
North Carolina.—Weldon, 3d; Raleigh, 3d, 4th.
Oregon.—Astoria, 12th.
Pennsylvania.—Gramplan Hills, 25th.
Tennessee.—Ashwood, 3d, 27th; Parksville, 3d; Covington, 26th.
Texas.—Silver Falls, 1st, 26th; Palestine, 10th.
Utah.—Salt Lake City, 8th.
Vermont.—Brattleborough, 11th, 25th.
Virginia.—Bird's Nest, 3d.
Washington Territory.—Tatoosh Island, 13th.

SLEET.

Sleet occurred in the various states and territories during the month, as follows:

Arkansas.—Little Rock, 2d; Fort Smith, 2d, 10th.
Dakota.—Fort Buford, 16th, 18th; Fort Yates, 17th; Webster, 18th; Fort Totten, 20th.
District of Columbia.—Washington City, 25th.
Florida.—Pensacola, 17th.
Georgia.—Athens, 27th.
Illinois.—Springfield, 12th.
Indiana.—La Grange, 6th.
Iowa.—Oskaloosa a, 10th; Oskaloosa b and Cedar Rapids, 11th; Fort Madison and Keokuk, 12th.
Kansas.—Fort Riley, 10th.
Maine.—Portland, 11th, 12th, 25th, 26th; Kent's Hill, 12th; Bar Harbor, 12th, 26th; Eastport, 26th.
Massachusetts.—Deerfield, 11th; Princeton, 12th.
Michigan.—Escanaba, Mackinaw City, and Marquette, 24th.
Minnesota.—Saint Paul, 9th; Moorhead, 20th.
Missouri.—Saint Louis, 11th, 12th.
Nebraska.—Omaha, 9th; Marquette, 10th.
New Hampshire.—Mount Washington, 13th, 14th.
New Jersey.—Phillipsburg, 25th.
New York.—Albany, 25th, 26th.
North Carolina.—Charlotte, 3d, 4th; Wilmington, 4th, 28th; Smithville, 28th.
Ohio.—Wauseon, 19th.
South Carolina.—Spartanburg, 2d; Aiken and Charleston, 27th.
Tennessee.—Bolivar and Grief, 2d; Parksville, 3d; Chattanooga, 2d, 3d; Memphis and Woodstock, 2d, 27th; Nashville and Rogersville, 15th; Milan and Hohenwald, 27th; Andersonville, 28th; Covington, 26th.
Virginia.—Norfolk, 3d.
Washington Territory.—Walla Walla, 1st.
Wisconsin.—Milwaukee, 26th.

Little Rock, Arkansas: the severest sleet storm in several years occurred on the 2d, all exposed surfaces were heavily coated with ice.

Nashua, Hillsborough county, New Hampshire: the storm of rain and sleet that occurred on the 12-13th was the most destructive in years; trees were loaded with ice, and many of the finest shade trees in the city were shorn of their largest limbs; the damage to fruit trees and shrubbery was also very great.

Worcester, Worcester county, Massachusetts: a destructive ice storm occurred on the 11th, doing great damage to shade and fruit trees, telegraph and telephone wires.

South Framingham, Middlesex county, Massachusetts: reports from Worcester county state that a severe ice storm occurred on the 12th, doing great damage to trees and shrubbery;

in Lancaster (a town noted for its elm trees) many of the finest trees were ruined; in Clinton the streets were blockaded with fallen branches, and at Marlborough, Middlesex county, great damage was done to orchards; in Leominster, Sterling, Harvard, and at other points along the line of the Worcester, Nashua and Rochester Railroad, the destruction of small fruit trees was very great and the financial loss can not be estimated.

Table of excessive and greatest monthly precipitation for February, 1886.

Station.	Specially heavy.		Largest monthly.	Station.	Specially heavy.		Largest monthly.
	Date.	Amt.			Date.	Amt.	
<i>Alabama</i> .				<i>Massachusetts</i> .—C'd			
Oswichee	27	2.54		Lawrence	10 to 14	4.31	6.19
Prattville	27	2.12		Milford	10 to 14	4.04	
Montgomery	27, 28	2.12		Dudley	11, 12, 13	3.90	
Newton	27	2.00		Princeton	11, 12, 13	4.07	
<i>Arizona</i> .				Amherst a	11, 12, 13	2.66	
Fort Apache	26, 27	2.14		Amherst b	11, 12, 13	2.35	
<i>Connecticut</i> .				Hopkinton	10 to 14	4.76	
New London	11, 12, 13	8.93	11.98	Lowell b	10 to 14	4.54	
Voluntown	11, 12, 13	8.00	11.25	Melrose	10 to 14	5.60	
Do	25, 26	2.00		Princeton	10 to 14	4.07	
Lake Konomoc	10 to 14	6.17	9.24	<i>Mississippi</i> .			
Wallingford	10 to 14	5.85	8.77	Vicksburg	10, 11	2.07	
Shelton	10 to 14	4.86	7.79	<i>Missouri</i> .			
Middletown	10 to 14	5.30	7.43	Springfield	1, 2	2.10	
Hartford b	10 to 14	4.63	6.35	<i>New Brunswick</i> .			
Hartford a	11, 12	3.62	6.16	Parker's Ridge			8.30
Bethel	11, 12, 13	3.25		Saint John			6.08
Do	25	2.00		<i>New Hampshire</i> .			
New Haven	11, 12	3.44		Mt. Washington	12, 13	7.44	9.03
<i>Delaware</i> .				Lake Village	11, 12, 13	2.40	
Cape Henlopen	11	2.04		Weir's Bridge	12, 13	2.54	
<i>Dist. of Columbia</i> .				Bristol	12, 13	2.11	
Washington City	11, 12	2.06		Woodstock	11, 12, 13	2.22	
<i>Kentucky</i> .				Belmont	11, 12	2.68	
Richmond	2, 3	2.50		Wolborough	11, 12, 13	3.14	
<i>Louisiana</i> .				Nashua	12, 13	3.66	
Liberty Hill	27	2.00		<i>New Jersey</i> .			
<i>Maine</i> .				Clayton	3, 4	4.50	8.00
Gardiner	25, 26	2.55	7.25	Sandy Hook	11	4.10	6.53
Kent's Hill	25, 26, 27	3.00	6.60	Moorestown			6.02
Cornish			6.00	South Orange	11, 12, 13	2.50	
Bridgeton			6.00	Vineland	10, 11	3.22	
Bar Harbor	12, 13	3.50		Atlantic City	11, 12	2.70	
Portland	12, 13	2.97		<i>New York</i> .			
Orono	25, 26, 27	2.60		Setauket	11, 12, 13	4.76	7.08
<i>Maryland</i> .				White Plains	11	3.25	6.40
Baltimore	11	2.60		New York City	11	3.17	
Fort Melleny	10, 11	2.24		<i>Oregon</i> .			
<i>Massachusetts</i> .				Bandon	6, 7	2.01	
Fall River	11, 12, 13	8.13	11.17	<i>Pennsylvania</i> .			
Taunton c	10 to 14	6.91	9.56	Germantown	3, 4	2.27	6.97
North Beverly	10 to 14	7.66	9.55	Do	11	2.25	
Long Plain	10 to 14	5.88	8.86	West Chester	11	2.14	6.22
Taunton d	10 to 14	6.83	8.85	Mahanoy Plane	3, 4	3.50	
Wellesley	10 to 14	5.70	8.82	Fallsington	11	2.25	
Beverly Farms	10 to 14	6.60	8.79	Quakertown	11	2.60	
Somerset	11, 12, 13	6.80	8.70	Philadelphia	11, 12	2.07	
Taunton b	10 to 14	6.53	8.67	<i>Rhode Island</i> .			
South Hingham	10 to 14	6.51	8.50	Block Island	11, 12	5.76	14.05
Blue Hill Ob'y			8.29	Providence b	10 to 14	9.04	11.83
Chestnut Hill	10 to 14	6.09	7.80	Olneyville	10 to 14	8.30	11.55
Waltham	10 to 14	6.08	7.84	Providence a	10 to 14	8.13	11.31
Salem	10 to 14	6.21	7.83	Pawtucket	10 to 14	7.92	11.18
Cambridge a	10 to 14	5.70	7.82	Lonsdale	10 to 14	7.69	10.74
Milton	11, 12, 13	5.60	7.70	Narragansett P'r	12, 13	7.80	10.64
Taunton d	11, 12, 13	6.83	7.52	Woonsocket a	10 to 14	6.74	
Lynn	10 to 14	5.68	7.47	Woonsocket b	10 to 14	6.38	
Cambridge b	10 to 14	5.63	7.35	<i>Tennessee</i> .			
Medford	10 to 14	5.58	7.31	Dickson			6.63
Mystic Lake	10 to 14	5.64	7.20	Trenton			6.47
Winchester	10 to 14	5.45	7.15	Memphis			6.43
New Bedford b	10 to 14	4.51	7.05	Milan	2	2.04	6.21
Boston	12	4.45	7.04	Austin	3, 4	2.10	
New Bedford a	10 to 14	4.51	6.97	<i>Texas</i> .			
Quincy	10 to 14	5.54	6.90	San Antonio	23, 24	2.05	
Lake Cochituate	10 to 14	4.95	6.86	Brownsville	21, 22	2.03	
Newburyport	10 to 14	4.78	6.75	<i>Virginia</i> .			
Westvale	10 to 14	4.93	6.75	Bird's Nest	11	2.03	
Lowell c			6.54	Fort Monroe	11, 12	3.30	
Mystic Station	10 to 14	5.11	6.51	Chincoteague	11, 12	2.18	
Concord a	10 to 14	4.90	6.40	<i>Washington Ter.</i>			
Concord b	10 to 14	4.59	6.35	Tatoosh Island	6	2.73	10.29
Worcester	11, 12, 13	4.75	6.32	Do	9, 10	2.05	
Westborough	11, 12, 13	4.63	6.28	Pysht	6	2.01	7.81
Framingham	10 to 14	4.64	6.28	Do	10, 11	2.07	
Lowell a	10 to 14	4.36	6.26				

TEMPERATURE OF WATER.

Observations were interrupted by ice throughout the month at Escanaba, Marquette, Alpena, Mackinaw City, and Detroit, Michigan; Duluth, Minnesota; Milwaukee, Wisconsin; Toledo and Sandusky, Ohio; Buffalo, New York; and at Cleveland, Ohio, from the 1st to 11th, 16th, 17th, 20th to 28th; Chicago, Illinois, 1st to 22d, 27th, 28th; Chincoteague, Virginia, 4th to 8th.